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Serial No. 09/964,864
Docket No. KOKUSAI 081

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AMENDMENTS TO THE CLAIMS:**Please amend the claims as follows:**

1. (Currently Amended) A base-station amplifier device for use in amplifying at least one channel to be transmitted from a base station, comprising:

amplitude limiting means for amplitude-limiting a base band signal of each of said at least one channel;

high-frequency modulating means for performing a high-frequency modulation on an output from said amplitude limiting means of each of said at least one channel;

adding means for adding outputs from said high-frequency modulating means;

amplifying means for amplifying an output from said adding means; and

amplitude controlling means for controlling said amplitude limiting means based on characteristics of said amplifying means,

wherein said amplitude controlling means controls said amplitude limiting means only when a number of said at least one channel exceeds a preset number, and

wherein said amplitude controlling means instructs said amplitude limiting means not to perform an amplitude limitation when the number of said at least one channel is small, and

wherein at a time of high traffic, said the amplitude controlling means outputs an amplitude controlling characteristic, and instructs said amplitude limiting means to perform the amplitude limitation based on the characteristic of said amplifying means.

2. (Canceled)

3. (Currently Amended) A base-station amplifier device as claimed in claim 1, further comprising:

detecting means arranged on at least one of an input side and an output side of said amplifying means, wherein said amplitude controlling means controls said amplitude limiting means based on said characteristic characteristics of said amplifying means and an output from said detecting means when said output from said detecting means exceeds a threshold value based on characteristics of said amplifying means.

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4. (Previously Presented) A base-station amplifier device as claimed in claim 1, wherein the number of said at least one channel is small at a time of a low traffic through the base-station.

5. (Currently Amended) A base-station amplifier device for use in amplifying at least one channel to be transmitted from a base station, comprising:

an amplitude limiting circuit that amplitude-limits a base band signal of each of said at least one channel;

a high-frequency modulator that performs a high-frequency modulation on an output from said amplitude limiting circuit of each of said at least one channel;

an adder that adds outputs from said high-frequency modulator;

an amplifier that amplifies an output from said adder; and

an amplitude controlling circuit that controls said amplitude limiting circuit based on characteristics of said amplifier,

wherein said amplitude controlling circuit controls said amplitude limiting circuit only when the number of said at least one channel exceeds a preset number, and

wherein said amplitude controlling circuit instructs said amplitude limiting circuit not to perform an amplitude limitation when the number of said at least one channel is small, and

wherein at a time of high traffic, said amplitude controlling circuit outputs an amplitude controlling characteristic, and instructs said amplitude limiting circuit to perform the amplitude limitation based on the characteristic of said amplifier.

6. (Currently Amended) A base-station amplifier device for use in amplifying at least one channel to be transmitted from a base station, comprising:

at least one amplitude limiting circuit that amplitude-limits a base band signal from each of said at least one channel;

an amplifier that amplifies an output from each of said at least one amplitude limiting circuit; and

an amplitude controlling circuit that controls said amplitude limiting circuit based on characteristics of said amplifier,

wherein said amplitude controlling circuit controls said amplitude limiting circuit only

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when the number of said at least one channel exceeds a preset number, and

wherein said amplitude controlling circuit instructs said amplitude limiting circuit not to perform an amplitude limitation during a time of a low traffic through the base-station, and

wherein at a time of high traffic, said amplitude controlling circuit outputs an amplitude controlling characteristic and instructs said amplitude limiting circuit to perform the amplitude limitation based on a characteristic of said amplifier.

7. (Previously Presented) The base-station amplifier device according to claim 6, further comprising:

at least one high-frequency modulator that performs a high-frequency modulation on an output from each of said at least one amplitude limiting circuit.

8. (Previously Presented) The base-station amplifier device according to claim 7, further comprising:

an adder that adds outputs from each of said at least one high-frequency modulator.

9. (Previously Presented) The base-station amplifier device according to claim 6, further comprising:

at least one modulator that orthogonally-modulates the base band signal of each of said at least one channel and outputs a modulated base band signal for each of said at least one channel to each of said at least one amplitude limiting circuit.

10. (Previously Presented) The base-station amplifier device according to claim 6, wherein said at least one channel comprises a plurality of channels.

11. (Currently Amended) The base-station amplifier device according to claim 6, further comprising:

a detector circuit arranged on at least one of an input side and an output side of said amplifier, wherein said amplitude controlling circuit controls said amplitude limiting circuit based on said characteristic ~~characteristics~~ of said amplifier and an output from said detector

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circuit when said output from said detector circuit exceeds a threshold value based on characteristics of said amplifier.

12. (Previously Presented) The base-station amplifier device according to claim 8, wherein said outputs from each of said at least one high-frequency modulator comprise high-frequency signals.

13. (Previously Presented) The base-station amplifier device according to claim 9, wherein each of said at least one amplitude limiting circuit is arranged on at least one of an output side of each of said at least one modulator and an input side of each of said at least one modulator.

14. (Previously Presented) The base-station amplifier device according to claim 13, wherein each of said at least one amplitude limiting circuit is arranged on the output side of each of said at least one modulator.

15. (Previously Presented) The base-station amplifier device according to claim 11, wherein said detector is arranged on the output side of said amplifier.

16. (Currently Amended) A method of controlling an amplitude limitation on a base signal transmitted from a base station, said method comprising:

- amplitude-limiting a base band signal of each of said at least one channel;
- performing a high-frequency modulation on an output from said amplitude limiting of each of said at least one channel;
- adding outputs from said high-frequency modulating;
- amplifying an output from said adding outputs; and
- controlling said amplitude limiting based on characteristics of said amplifying, wherein said controlling controls said amplitude-limiting only when a number of said at least one channel exceeds a preset number, and
- wherein said controlling instructs said amplitude-limiting not to perform an amplitude limitation when the number of said at least one channel is small, and

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wherein at a time of high traffic, said amplitude controlling outputs an amplitude controlling characteristic, and instructs said amplitude limiting to perform the amplitude limitation based on the characteristic of said amplifying.

17. (Currently Amended) The method according to claim 16, further comprising:

detecting at least one of an input and an output of said amplifying, wherein said amplitude limiting is controlled based on said characteristic ~~characteristics~~ of said amplifying and an output from said detecting when said output from said detecting exceeds a threshold value based on characteristics of said amplifying.

18. (Previously Presented) The method according to claim 16, wherein the number of said at least one channel is small at a time of a low traffic through the base-station.

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